

REMARKS**I. STATUS OF THE CLAIMS**

Claims 1-2, 5, 10-11, 13, 38 and 39 are pending in the present application. Claims 1 and 10 are the independent claims.

Claims 15-23, 32, 34 and 35 are withdrawn from consideration.

II. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER 35 U.S.C. § 102(e) AS BEING ANTICIPATED BY KWEON 2002/71990

Applicants respectfully traverse this rejection for at least the following reasons.

The date of invention of the instant invention is at least April 2, 2001, which is the foreign priority date based upon the prior filing of the foreign counterpart to the instant application in the Korean Intellectual Property Office. A copy of the foreign counterpart was previously filed, as acknowledged by the Examiner on page 3 of the Office Action mailed January 26, 2004.

An English translation of the priority document Korean Application No. 2001-17298 claiming priority to April 2, 2001, along with a corresponding statement from the translator in compliance with 37 CFR 1.55(a)(4) was submitted on September 17, 2004. As such, it is respectfully submitted that the applicants have established a date of invention of at least April 2, 2001.

Kweon 2002/71990 has a filing date of July 3, 2001. As noted above, the present application claims priority to April 2, 2001. Accordingly, Kweon 2002/71990 has a filing date which is after the priority date of the present application.

Accordingly, Applicants respectfully assert that the rejection of claims 1, 2, 5, 10-11 and 13 under 35 U.S.C. § 102(e) should be withdrawn because Kweon 2002/71990 does not qualify as prior art under 35 U.S.C. § 102(e).

III. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER 35 U.S.C. § 102(e) AS BEING ANTICIPATED BY KWEON 2003/3352

Applicants respectfully traverse this rejection for at least the following reasons.

The date of invention of the instant invention is at least April 2, 2001, which is the foreign priority date based upon the prior filing of the foreign counterpart to the instant application in the

Korean Intellectual Property Office. A copy of the foreign counterpart was previously filed, as acknowledged by the Examiner on page 3 of the Office Action mailed January 26, 2004.

An English translation of the priority document Korean Application No. 2001-17298 claiming priority to April 2, 2001, along with a corresponding statement from the translator in compliance with 37 CFR 1.55(a)(4) was submitted on September 17, 2004. As such, it is respectfully submitted that the applicants have established a date of invention of at least April 2, 2001.

Kweon 2003/3352 has a filing date of February 12, 2002. As noted above, the present application claims priority to April 2, 2001. Accordingly, Kweon 2003/3352 has a filing date which is after the priority date of the present application.

Accordingly, Applicants respectfully assert that the rejection of claims 1, 2, 5, 10-11 and 13 under 35 U.S.C. § 102(e) should be withdrawn because Kweon 2003/3352 does not qualify as prior art under 35 U.S.C. § 102(e).

IV. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER 35 U.S.C. § 102(e) AS BEING ANTICIPATED BY KWEON '111 (U.S. Patent No. 6,753,111)

Applicants respectfully traverse this rejection for at least the following reasons.

The date of invention of the instant invention is at least April 2, 2001, which is the foreign priority date based upon the prior filing of the foreign counterpart to the instant application in the Korean Intellectual Property Office. A copy of the foreign counterpart was previously filed, as acknowledged by the Examiner on page 3 of the Office Action mailed January 26, 2004.

An English translation of the priority document Korean Application No. 2001-17298 claiming priority to April 2, 2001, along with a corresponding statement from the translator in compliance with 37 CFR 1.55(a)(4) was submitted on September 17, 2004. As such, it is respectfully submitted that the applicants have established a date of invention of at least April 2, 2001.

Kweon '111 has a filing date of September 25, 2001. As noted above, the present application claims priority to April 2, 2001. Accordingly, Kweon '111 has a filing date which is after the priority date of the present application.

Accordingly, Applicants respectfully assert that the rejection of claims 1, 2, 5, 10-11 and 13 under 35 U.S.C. § 102(e) should be withdrawn because Kweon '111 does not qualify as prior

art under 35 U.S.C. § 102(e).

V. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER 35 U.S.C. § 102(e) AS BEING ANTICIPATED BY KWEON '435 (U.S. Patent No. 6,797,435)

Applicants respectfully traverse this rejection for at least the following reasons.

The date of invention of the instant invention is at least April 2, 2001, which is the foreign priority date based upon the prior filing of the foreign counterpart to the instant application in the Korean Intellectual Property Office. A copy of the foreign counterpart was previously filed, as acknowledged by the Examiner on page 3 of the Office Action mailed January 26, 2004.

An English translation of the priority document Korean Application No. 2001-17298 claiming priority to April 2, 2001, along with a corresponding statement from the translator in compliance with 37 CFR 1.55(a)(4) was submitted on September 17, 2004. As such, it is respectfully submitted that the applicants have established a date of invention of at least April 2, 2001.

Kweon '435 has a filing date of January 16, 2002. As noted above, the present application claims priority to April 2, 2001. Accordingly, Kweon '435 has a filing date which is after the priority date of the present application.

Accordingly, Applicants respectfully assert that the rejection of claims 1, 2, 5, 10-11 and 13 under 35 U.S.C. § 102(e) should be withdrawn because Kweon '435 does not qualify as prior art under 35 U.S.C. § 102(e).

VI. THE REJECTION OF CLAIMS 1-2, 5, 10-11, 13 AND 38-39 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER U.S. PATENT NO. 5,705,291 TO AMATUCCI (HEREINAFTER AMATUCCI) IN VIEW OF JAPANESE PUBLICATION 09-171813 TO HIROSHI (HEREINAFTER JP '813)

Applicants respectfully traverse this rejection for at least the following reasons.

Independent claim 1 recites a positive active material composition for a rechargeable lithium battery comprising, amongst other novel aspects, at least one amorphous **additive compound** selected from the group consisting of a thermal-absorbent element-included hydroxide, a thermal-absorbent element-included oxyhydroxide, a thermal-absorbent element-included oxycarbonate, and a thermal-absorbent element-included hydroxycarbonate, wherein **said at least one amorphous additive compound comprises an amount at or between 0.1**

weight % and 1 weight % based on the weight of the positive active material composition and wherein the thermal-absorbent element is an element selected from the group consisting of Mg, Al, Co, K, Na, Ca, Si, Ti, Sn, V, Ge, Ga, As, and Zr.

Independent claim 10 recites a positive active material composition for a rechargeable lithium battery comprising, amongst other novel features, at least one additive compound selected from the group consisting of a thermal-absorbent element-included hydroxide, a thermal-absorbent element-included oxyhydroxide, a thermal-absorbent element-included oxycarbonate, and a thermal-absorbent element-included hydroxycarbonate, wherein the thermal-absorbent element is one of amorphous Al and crystalline B, and **wherein said at least one additive compound comprises an amount at or between 0.1 weight % and 1 weight % based on the weight of the positive active material composition.**

The Office Action relies upon Amatucci for such teachings and indicates that Amatucci discloses a positive electrode comprising a lithiated composition particulate. The Office Action also recites that the positive electrode is coated with a passivating layer of a composition comprising a borate, lithiated borate, aluminate, lithiated aluminate, silicate, lithiated silicate or mixtures thereof (abstract). The Office Action further recites that the coating composition represents the additive compounds and that the additive compounds can be added in the amounts ranging from 0.4 to 1.0 % by weight (Examples 1-3), as recited in independent claims 1 and 10.

The Office Action recognizes that Amatucci fails to teach the thermal absorbent material (page 14 of the Office Action) and relies upon JP '813 for such teaching. The Office Action further recites that JP '813 discloses an active material comprising a lithiated compound and aluminum hydroxide and that the aluminum hydroxide is the thermal absorbent element.

Therefore, the Office Action recites that it would have been obvious to one of ordinary skill in the art to combine Amatucci with JP '813 to use the additive compound within the claimed range (page 34 of the Office Action).

However, JP '813 discloses using aluminum hydroxide as an additive compound in an amount of 10 weight section in the production of the positive electrode (paragraph 0035 and 0036) and not in **an amount at or between 0.1 weight % and 1 weight % based on the weight of the positive active material composition**, as recited in independent claims 1 and 10. Because there is no teaching or suggestion in JP '813 of using an additive compound in the amount recited in independent claims 1 and 10, it would not have been obvious to one of ordinary skill in the art to combine Amatucci with JP '813.

Additionally, Amatucci discloses that borate and lithiated borate **glasses** are particularly suitable for this purpose (column 4, lines 13-18). However, an aspect of the present invention does not use glass.

MPEP § 2143.01 instructs that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ 2d 1430 (Fed. Cir. 1990)."

In the instant case, the ranges disclosed by Amatucci and JP '813 are at odds. Therefore, Applicants respectfully submit that there is no motivation or suggestion to combine the references.

Furthermore, Applicants respectfully submit that the only motivation to combine Amatucci and JP '813 is found in the Applicant's own application. MPEP § 2141 instructs that "the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention." MPEP 2143 instructs that "the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ 1438 (Fed. Cir. 1991)." The Federal Circuit has clearly held that "the motivation to combine references cannot come from the invention itself." Heidelberger Druckmaschinen AG v. Hantscho Commercial Products, Inc., 21 F.3d 1068, 30 USPQ 2d 1377 (Fed. Cir. 1993).

Thus, Applicants respectfully submit that the Office Action has not established a prima facie case of obviousness and that the rejections under 35 U.S.C. § 103(a) should be withdrawn.

Furthermore, Applicants respectfully assert that dependent claims 2, 5, 11, 13 and 38-39 are allowable at least because of their dependence from claims 1 and 10, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 2, 5, 11 and 38-39 also distinguish over the prior art.

VII. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER THE JUDICIALLY CREATED DOCTRINE OF OBVIOUSNESS-TYPE DOUBLE PATENTING AS BEING UNPATENTABLE OVER CLAIMS 1-3, 11 AND 15 OF U.S. PATENT NO. 6,797,435 IN VIEW OF AMATUCCI.

Since claims 1-2, 5, 10-11 and 13 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claim would be premature. MPEP 804(I)(B).

As such, it is respectfully requested that the applicant be allowed to address any

provisional obviousness-type double patenting issues remaining once the rejections of the claim under 35 U.S.C. §§ 112, 102 and 103 are resolved.

Furthermore, Kweon '435 relates to a positive active material with a surface-treatment layer comprising at least one coating element -included compound, while an aspect of the present invention relates to a positive active material composition for a rechargeable lithium battery.

VIII. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER THE JUDICIALLY CREATED DOCTRINE OF OBVIOUSNESS-TYPE DOUBLE PATENTING AS BEING UNPATENTABLE OVER CLAIMS 1-5, AND 12-17 OF U.S. PATENT NO. 6,753,111

Since claims 1-2, 5, 10-11 and 13 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claim would be premature. MPEP 804(I)(B).

As such, it is respectfully requested that the applicant be allowed to address any provisional obviousness-type double patenting issues remaining once the rejections of the claim under 35 U.S.C. §§ 112, 102 and 103 are resolved.

Furthermore, Kweon '111 relates to a positive active material with a surface-treatment layer comprising a coating-element-included oxide or hydroxide, while an aspect of the present invention relates to a positive active material composition for a rechargeable lithium battery.

IX. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER THE JUDICIALLY CREATED DOCTRINE OF OBVIOUSNESS-TYPE DOUBLE PATENTING AS BEING UNPATENTABLE OVER CLAIMS 1-15, 28-30 AND 32-35 OF CO-PENDING APPLICATION NO. 10/189,384 (U.S. Patent Application Publication No. 2003/54250)

Since claims 1-2, 5, 10-11 and 13 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claim would be premature. MPEP 804(I)(B).

As such, it is respectfully requested that the applicant be allowed to address any provisional obviousness-type double patenting issues remaining once the rejections of the claim under 35 U.S.C. §§ 112, 102 and 103 are resolved.

Furthermore, Application No. 10/189,384 relates to a positive electrode comprising a surface-treatment layer comprising a conductive agent and at least one coating-element-

containing hydroxide, while an aspect of the present invention relates to a positive active material composition for a rechargeable lithium battery.

X. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER THE JUDICIALLY CREATED DOCTRINE OF OBVIOUSNESS-TYPE DOUBLE PATENTING AS BEING UNPATENTABLE OVER CLAIMS 1-5 AND 23-38 OF CO-PENDING APPLICATION NO. 10/072,923 IN VIEW OF AMATUCCI

Since claims 1-2, 5, 10-11, and 13 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claim would be premature. MPEP 804(I)(B).

As such, it is respectfully requested that the applicant be allowed to address any provisional obviousness-type double patenting issues remaining once the rejections of the claim under 35 U.S.C. §§ 112, 102 and 103 are resolved.

Furthermore, Application No. 10/072,923 relates to a positive electrode comprising a surface-treatment layer formed on a positive active material layer, while an aspect of the present invention relates to a positive active material composition for a rechargeable lithium battery.

XI. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER THE JUDICIALLY CREATED DOCTRINE OF OBVIOUSNESS-TYPE DOUBLE PATENTING AS BEING UNPATENTABLE OVER CLAIMS 1-10 AND 25-37 OF CO-PENDING APPLICATION NO. 09/897,445 (U.S. Patent Application Publication No. 2002/0071990)

Since claims 1-2, 5, 10-11, and 13 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claim would be premature. MPEP 804(I)(B).

As such, it is respectfully requested that the applicant be allowed to address any provisional obviousness-type double patenting issues remaining once the rejections of the claim under 35 U.S.C. §§ 112, 102 and 103 are resolved.

Furthermore, Application No. 09/897,445 relates to a positive active material with a surface-treatment layer, while an aspect of the present invention relates to a positive active material composition for a rechargeable lithium battery.

XII. THE REJECTION OF CLAIMS 1-2, 5, 10-11 AND 13 UNDER THE JUDICIALLY CREATED DOCTRINE OF OBVIOUSNESS-TYPE DOUBLE PATENTING AS BEING UNPATENTABLE OVER CLAIMS 1-10 AND 25-37 OF CO-PENDING APPLICATION NO. 10/627,725 (U.S. Patent Publication No. 2004/0018429)

Since claims 1-2, 5, 10-11, and 13 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claim would be premature. MPEP 804(I)(B).

As such, it is respectfully requested that the applicant be allowed to address any provisional obviousness-type double patenting issues remaining once the rejections of the claim under 35 U.S.C. §§ 112, 102 and 103 are resolved.

Furthermore, Application No. 10/627,725 relates to a positive active material with a surface-treatment layer, while an aspect of the present invention relates to a positive active material composition for a rechargeable lithium battery.

XIII. CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 503333.

Respectfully submitted,

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